Proposed Project "Arche Noah"

Pre-Feasibility Assessment

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<u>Glossary</u>

CI EECONET EU EUCC GEF GIS IUCN KfW NGO NP PA TNC	American International Development Agency Communal Areas Management Program for Indigenous Resources Conservation International European Ecological Network European Union European Union for Coastal Conservation Global Environment Facility Geographic Information System International Union for Nature Conservation Kreditanstalt fuer Wiederaufbau Non-Government Organization National Park Protected Area The Nature Conservancy
UN	United Nations
WWF	World Wide Fund for Nature

A INTRODUCTION

1. Dr. Ruck, MdB, plans to establish a profit-oriented enterprise (share company or foundation) in favour of the sustainable conservation of biodiversity in developing countries. The proposed enterprise is to be financed through private investors, industry, corporations as well as donations. The purpose of this project is to purchase freehold land units of designated "ecological hotspot" areas worldwide to be managed by the planned enterprise. The project is named "Arche Noah", and it is intended to support economically viable and environmentally sound projects aiming at sustainable conservation management. This is expected to be achieved through the use of revenue generating opportunities (e.g., eco-tourism, sustainable trophy hunting and/or wildlife utilization, wildlife viewing/photography, scientific tourism, sustainable resource extraction, forest management, etc.) which are compatible with the overall conservation objective.

2. In October 2000, KfW commissioned Dr. Goetz Schuerholz to assess the general feasibility of the proposed project "Arche Noah". The terms of reference for this five-day assignment are attached to the report (Annex 1). It is evident that time constraints did not permit an in-depth study of the issues at stake.

B APPROACH

3. In accordance with the terms of reference, the consultant conducted a limited literature search of worldwide experience with similar projects, mostly relying on information retrieved via the Internet. This was complemented through written background information provided by key international non-government organizations from Europe, North America and Australia that were contacted for this purpose.

4. The literature review was followed by telephone conversations with key persons related to land purchases for conservation management worldwide. Communication was also established with representatives of leading NGOs in international conservation management, key persons affiliated with conservation grants, foundations, debt swaps for nature, eco-tourism, the GEF and the World Bank. A standardized questionnaire was submitted to leading NGOs involved in the purchase of conservation areas in developing countries in order to obtain qualitative and quantitative information on technical issues and lessons learned. Emphasis in telephone interviews was placed on "lessons learned".

C RESULTS

General Comments

5. The project idea under review fits a new trend that is gaining increasing popularity amongst national and international non-governmental conservation organizations (NGOs) worldwide. Land purchases for the sustainable conservation of biological diversity appear to be the reaction to ruthless destruction of natural

ecosystems worldwide for short-term economic benefits and the inability of national governments to effectively deal with this problem inside and outside of designated "protected areas". It is suggested that protected areas that are owned and operated privately allow for a more efficient and cost-effective management than government-run operations, with the ability to generate revenues and sizable profits, while safeguarding ecological integrity.

6. Although the concept of land purchases for biodiversity protection has been successfully applied for decades by NGOs in North America (e.g., Ducks Unlimited, Sierra Club, Nature Conservancy, etc.) and more recently in Europe (WWF family, NABU, Euronatur, etc.), it is a relatively new conservation tool in developing countries. There are, however, examples of conservation units that have been purchased and are owned and operated by national NGOs on all continents. For the Brazilian NGO BIODIVERSITAS the purchase of threatened ecosystems seems the only long-term solution to save what is left of the Mata Atlantica ecosystem which is globally renowned for its biological diversity and high level of endemism. In cooperation with local landowners, this NGO has become very effective in purchasing strategically located sections of land that still sustain relicts of original ecosystems and that serve as ecological stepping stones, in an effort to establish ecological connectivity. These areas are strictly protected against extractive resource use by the NGO and by neighbouring landowners. The NGO trains the landowners in sustainable land use management techniques that increase their profits and benefit nature conservation.

7. Several European NGOs have taken a similar approach, mostly in close cooperation with national governments under co-financing agreements for the purchase of privately owned lands and the follow-up management (WWF National Organizations in several European countries¹). The German based umbrella NGO Euronatur has successfully applied this model to several East European countries, involving local NGOs from the recipient countries.

8. The principal idea of the project "Arche Noah", namely to purchase lands in developing countries as an effective means of placing representative samples of globally important, but threatened ecosystems under sustainable protection, is not new. The US based NGOs Conservation International (CI) and The Nature Conservancy (TNC) have aggressively been purchasing millions of hectares of land in ecological "hotspot areas" located in developing countries on all continents, to be set aside for permanent protection. This could only be achieved with the financial assistance of international corporations and businesses that provide funding for different reasons (e.g., in compensation for environmental damage caused; to contribute to a "good cause"; for tax benefits, to improve public relations; image improvement; right to use in advertisements, etc.).

9. The novelty regarding the project "Arche Noah", however, is that lands to be purchased in developing countries for biodiversity conservation are to be managed for profit by foreign-owned share companies that are traded on the international stock market, or as part of a bank-operated mutual fund. The premise of the proposed project

¹ Thomas Neumann, WWF Germany. Pers. commun., 23 October, 2000.

is "profit-making" but not "profit-maximizing" while conserving biodiversity of global importance under private (i.e., more efficient) rather than government management.

10. Although share companies that focus on protected areas and that are traded on stock markets may be rare to date, at least one precedent is set in Australia through the limited company "Earth Sanctuaries" (ESL). Contrary to the proposal under review, ESL's land acquisitions are restricted to Australia, thus reducing the overall risk that is much higher when operating in developing countries. In ESL's case, the question of sovereignty is not an issue. This problem could be encountered with the "Arche Noah" proposal (i.e., foreigners buying and managing land in a developing country).

11. There are many open questions regarding the proposal under review. Some of them were addressed in a brainstorming meeting that took place earlier this year under the auspices of WWF Germany in Frankfurt². Although the following brief will shed some light on the complex issues related to the proposal, many questions can only be answered within a more comprehensive feasibility study. Before drawing any conclusions and making any recommendations regarding a follow-up assessment, key issues related to the proposal will be discussed in the following chapters.

Types of Business Organization

i) Share Companies and Mutual Funds offering "ethical" and "green" stocks and bonds.

12. Unfortunately, there is no clear definition of "ethical" or "green" (= environmental) stocks or funds anywhere. Both are more popular in Europe than in North America. The first known environmental funds in Europe invested according to so-called "positive" or "negative" criteria. Negative criteria exclude companies from investments for ethical, social, or ecological reasons. In contrast, positive criteria allow investments in companies that qualify for ethical, social and ecological reasons. For example, environmental technical funds focus on technical companies that produce alternative energy and that are involved in recycling.

13. Within the past years the range of environmental funds has broadened considerably, also expanding the criteria for qualifying companies. The Dow-Jones-Group, for example, issues certificates for "sustainability funds". Such funds are governed not only by ecological and economic considerations, but introduce a "social" component. Another, more recent fund family with increasing popularity invests in "eco-efficient" companies that are not necessarily involved in the production of environmentally related items, but that have the leading edge as "environmentally efficient" companies. Qualifying companies may range from the chemical industry to car producers. Volkswagen happens to be one of them. The justification: the company is considered the industry leader in terms of "eco-efficiency" within the automobile industry. Many European Banks have assembled share companies that qualify for

² Minutes of meeting regarding the terms of reference for a feasibility study related to the proposed project Operation "Arche Noah". WWF Germany, Frankfurt, 14 January, 2000.

environmental funds in response to increasing public demand. The prospects in Europe for environmental funds are considered positive.

14. In North America, there is also a variety of "ethical" stocks that are offered as part of a mutual fund family that invests in ethical or environmentally sustainable industries. In general, the demand for environmental funds in North America lags well behind Europe. In North America, "*Ethical Funds*" are considered the "purest" of funds that are mostly concerned with social issues rather than with the environment. Another group of funds is traded as "*Clean Environment Funds*". These funds invest in businesses that are environmentally "sustainable" per definition, but that do not operate according to some specified ethical guidelines. "*Universal Global Ethics*" is a relatively new fund family that operates according to comprehensive ethical and socially acceptable guidelines. The so-called "*Templeton Funds*" is another group that is not "ethical" per se, but that has strict guidelines against buying "sin" stocks, i.e., those companies which produce alcohol, tobacco or weapons.

15. Although the option of a profit-oriented share company as suggested for the "Arche Noah" project may be feasible in principle, the risks associated with foreign ownership of a conservation unit and the risks of managing such a unit by a foreign company - even if legally possible - are extremely high. This option therefore does not seem feasible without a local partner (local NGO, government or the private sector). The idea of forming a share company or mutual fund has great merits and good future prospects. In this context, it is interesting to note that "environmental" funds in particular that invest in sustainable technical industries dealing with alternative energy, have not been negatively affected by the dramatic market fluctuations experienced by the majority of high-tech stocks. The recent increase in fossil fuel prices has greatly enhanced environmental funds and stocks of enterprises dealing with alternative energies. The same increase in stock value may be noted for companies concerned with environmentally acceptable solid waste disposal/recycling. The prospects for environmental funds are perceived to be positive. There may be good potential for funds related to projects such as "Arche Noah", provided the risks can be reduced to acceptable levels.

ii) Trust Funds and Foundations

16. There are various types of environment funds currently being used internationally. The Global Environment Facility (GEF) has supported conservation trust funds in several countries as a means to provide long-term funding for biodiversity conservation. The GEF is currently the major source of international funding available for capitalization of trust funds. Those supported by the GEF have been set up as *trust funds* (in countries whose legal systems are based on British or US models) or (in most civil law countries) as *foundations*. In either case, these funds legally set aside assets (e.g., GEF grants) whose use is restricted to specific purposes set out in a legal trust instrument. They can be structured financially in three ways. When an *endowment fund* is created, the financial assets of the fund are invested to earn income, and only that income is used to finance agreed-upon activities. *Sinking funds* are designed to disburse their entire principal and investment income over a fixed period of time, usually

a relatively long period of about 15 years. *Revolving funds* provide for the receipt of new resources on a regular basis: for example, proceeds of special taxes to pay for conservation programs which can replenish or augment the original capital of the fund and provide a continuing source of money for specific activities. Any environmental fund can combine these features depending on its sources of capital.

17. It seems that there is no "typical" trust fund. The fund's structure, scope of activities, priorities, and procedures vary according to the purposes for which it was set up, and according to the situation of the country they serve. Some are national, some regional, some dedicated to a particular biodiversity resource. Many current conservation trust funds have rather broad mandates. Most current conservation trust funds either support specific protected areas such as national parks within a national protected area system, or they operate as "grants" funds that channel resources to target groups (NGOs and community-based organizations). The latter typically support a broad range of conservation and sustainable management projects, and often include the development of civil society institutions in their objectives.

18. A recent assessment³ of a broad array of conservation trust funds supported by GEF and others resulted in the following observations and recommendations:

- Financial mechanism that facilitates large-scale debts-swaps or international grants that can "retail" funds into smaller projects over long periods of time;
- Success depends on ability to (a) participate in developing national conservation strategies, (b) work with public and private agencies to develop flexible and effective management approaches, and (c) nurture community groups and other organizations becoming involved in biodiversity conservation for the first time;
- Excellent for supporting protected areas, and expanding national networks of PAs, and providing a basic "resource security" for their operations;
- Generating and managing financial resources;
- Enabling participation of civil society institutions in resource conservation;
- Increase level of scientific research;
- Increase public awareness of conservation issues;
- Trust funds have leveraged substantial additional funding for conservation;
- Most funds are set up as non-government institutions with mixed public-private governing bodies. Larger boards seem to be more advantageous than smaller boards;
- Most funds keep their operating costs below 25 per cent;
- Most funds displayed successful asset management based on sound conservation risk strategies and portfolio diversification.

19. It was noted that uncertainty remains, however, about the trust funds' ability to demonstrate long-term biodiversity conservation impacts. Furthermore, where there is a clear need and strong local support (Uganda, South Africa) site-specific funds have been very effective. It is concluded that trust funds are generally appropriate when the

³ Global Environment Facility, 1999. Experience with Conservation Trust Funds. Evaluation report # 1-99. Washington, D.C.

issue addressed is long-term in nature. Where threats to biodiversity are serious and immediate, and where such threats can be readily addressed through rapid mobilization of relatively large amounts of funding, traditional project funding may be more appropriate.

iii) Joint Ventures (with Government, Civil Society, Industry)

20. At present, there is a broad range of models regarding co-ownership and comanagement of conservation units in use in developing countries. They are mostly related to international NGOs and the international donor community, which are active in the field of biodiversity conservation. Most projects support the sustainable management of protected areas of every conceivable category. Typical pros and cons for the different models in use are presented in Annex 2. The Annex clearly indicates that all models involve local partners, either from the public or private sector, or both. The table also shows that direct partnerships with governments are not the most costeffective and/or desirable option for a variety of reasons. Partnerships between international NGOs and local NGOs and/or private landowners appear to be the best arrangements with respect to sustainable financing, management and biodiversity conservation.

21. There is an equally broad range of models in use regarding legal land ownership of protected areas under different forms of management. Current examples range from freehold purchase by foreign investment capital, varying forms of co-financing the purchase of blocks of land to the purchase of lease agreements, long-term concessions, purchase of user rights, etc. Each arrangement has to be assessed on the basis of its success. Corresponding risks vary from case to case, depending on the respective national legal framework, commitment by national governments, government stability, and many other factors. It appears safe to assume that freehold purchases may be advisable if management and ownership of purchased land is transferred to local partners or the respective government. However, it may not be a desirable solution if land prices are inflated and/or if no local partners are involved because of the permanent latent threat of expropriation under foreign ownership.

Revenue Generation, Profitability and Sustainability

i) Eco-tourism

22. Eco-tourism means many things to different parties from the tourist and the environmentalist to the tour operator and government official. In its purest sense, it is a tourism industry that claims to have a low negative impact on the environment and local culture, while helping to generate money, jobs, and to preserve wildlife and vegetation. For many observers, eco-tourism is no panacea for developing countries. Its dangers are as manifold as its potential for good. However, the point is that eco-tourism is here to stay. Whether or not it lives up to the expectations, it generates billions of dollars globally and is reported to be growing at a pace of 10 - 15 per cent every year.

Estimates fluctuate considerably, but according to the Canadian Wildlife Service⁴, over US \$ 200 billion were globally spent on eco-tourism activities already by 1990. The phenomenal rise of eco-tourism goes hand-in-hand with the spread of private investment and the free market economy, as well as the growth of environmentalism. Tourism has become a major economic factor in conservation and wildlife conservation projects, and key players in the international community such as the World Bank, the EU and others, in alliance with international NGOs and businesses, are spreading its promotion.

23. Many developing countries and international donors envision a "paradise gained" through eco-tourism. True, nature-based tourism is less damaging to the environment than mining, logging and other commercial activities if managed properly. It therefore could and probably should become an economic development focus in all suitable areas. Eco-tourism depends on an integrated policy involving governments, tourists, and tour operators, but above all it is at the village level that control needs to be handed over to local people. However, only an insignificant percentage of protected areas worldwide are truly suitable to accommodate revenue-generating tourism, either because of low carrying capacities for tourists (e.g., ecologically highly sensitive areas), or because of other particular circumstances (e.g., un-attractiveness as tourist destination, isolation, in-accessibility, etc.). Exceptions given, it is an illusion to believe that protected areas can be financially self-reliant through eco-tourism development.

24. Photo safaris and wildlife viewing are among the most popular revenue generating activities that attract the average tourist to Africa's national parks. Revenues are enormous, and the future potential is excellent. The area attracts tens of thousands of tourists per year, with numbers still increasing. However, safety concerns, deteriorating infrastructure, political instability and dwindling wildlife populations in many government-operated areas continue to result in dramatic declines in tourist numbers in several African countries. This has shifted wildlife viewing activities in favor of private resorts and private land holdings that guarantee tourist safety and maintain high infrastructure standards.

25. Gorilla viewing in central African countries provides an example for lucrative wildlife viewing opportunities that benefit both local economies and the protection of wildlife habitat. However, political upheavals, low tourist safety and depressed local economies have had detrimental impacts on this activity in recent years. Typical pros and cons associated with wildlife viewing are summarized in Table 1.

<u>Table 1:</u> Typically cited pros and cons related to wildlife viewing

PROS	CONS
Photo safaris and wildlife viewing (includes birding, whale watching, etc.)	 Needs strict control in areas with

⁴ Canadian Wildlife Service, 1999. PANOS Media Briefing. Ottawa.

 Very important revenue generator for protected areas. Low negative environmental impact if managed properly. Excellent educational and awareness building opportunities. Excellent opportunity for profit sharing with local communities. Creates jobs locally and boosts local economy. Appeals to highly diversified clientele of all age and income categories. 	 tendency to over-crowding. Potential for detrimental environmental impacts. Transport of international "ecotourists" to destination at great environmental cost. Habituation of animals may lead to conflicts and disease transfer.
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26. Although South America may lack Africa's spectacular plains animals, it offers excellent wildlife viewing opportunities that still need to be exploited for eco-tourism. With few exceptions (e.g., Galapagos in Ecuador, Huancaroma and Machu Pichu in Peru, Easter Island and Torres del Paine in Chile, the Dominican Republic and Costa Rica's protected areas, etc.), most protected areas in South America lack basic tourism infrastructure.

27. Several Asian countries are quite advanced in providing for eco-tourism as related to protected areas. Nepal serves as a prime example: it receives its foreign earnings mostly through tourists trekking in Nepal's national parks, complemented through visits to cultural sites. There is a high potential in Asia to expand on existing opportunities in several countries that have been identified as "ecological hotspots". Asian wildlife is spectacular, in parts equaling Africa's wildlife. Photo safaris and wildlife viewing in protected areas have a particular high potential in India and neighbouring countries where eco-tourism can be offered together with cultural tourism. Similar opportunities exist in South and Central America. Appropriate marketing strategies still have to be developed to capitalize on "package" opportunities.

28. There is a large diversity of revenue-generating nature-based tourism activities offered in protected areas worldwide. Although most of them may be compatible with overall conservation objectives in principle, each activity has to be assessed in the context of each particular area in order to assess its compatibility with the overall conservation objectives. Frequently, in the absence of proper management plans and of sound background knowledge on activity-specific carrying capacities of a conservation area, negative impacts will result. It is therefore imperative to elaborate participatory management plans that incorporate local knowledge prior to taking decisions on area-specific permissible activities. It is understood that local experience cannot necessarily be extrapolated and applied to a different part of the world. Each area has to be carefully assessed in its own context.

29. Some of the more common revenue-generating, eco-tourism related and other activities currently offered in protected areas worldwide are listed in Annex 3. Before embarking on any revenue-generating scheme, however, an environmental impact assessment should be carried out in order to prevent threats to the ecological integrity

of such ecosystems that the respective conservation unit tries to protect. The feasibility assessment should also address socio-cultural sensitivities and the legality of activities to be offered in a specific country.

30. Both Conservation International (CI) and The Nature Conservancy (TNC), two of the world's leading non-government organizations, maintain active eco-tourism departments as a way to achieve self-sufficiency for the sites that have been purchased and/or leased by these NGOs for sustainable biodiversity conservation. TNC and CI do not operate the eco-tourism operations, but they help develop these operations locally. They also offer access to eco-tourism information, particularly through CI's Eco-tourism Center on the Internet. CI's tourism program focuses on "biodiversity hotspots" that are home to a vast diversity of life, and that are under severe threat⁵. CI works within these hotspot countries around the world, offering travel opportunities that benefit local communities and preserve the environment.

31. Although TNC has only been operating its eco-tourism department for two years, already one partner at Rio Bravo in Belize is generating 50 per cent of its budget through eco-tourism. In Belize the Protected Area Conservation Trust Act was recently enacted, prescribing a framework for conservation protection through such activities as ecological assessments, management plans, generating funding for conservation, and supporting programs which promote the tourism to protected areas.

32. The Australian and Costa Rican governments are world leaders in developing eco-tourism certification programs, although these are not directed specifically at protected areas. In Australia a Daintree Rescue Package is being used to develop a pilot program of cooperative management agreements with sympathetic private landowners, some of which wish to be small-scale eco-tourism operators.

33. The Australian company: ESL manages fifteen cash flow activities for the company-owned (freehold) protected areas. Revenue-generating activities include guided walks, tours, filming and photography, consulting services, conferences, accommodations, food and beverage sales, education, special events, consulting, contract management, wildlife sales, and donations. With its shrewd business plan and a sound board of directors the company runs a profitable business that appears attractive to a broad range of investors, well beyond the scope of investors in search of "ethical" and "green" money-making opportunities.

ii) Hunting Safaris

34. Hunting tourism is a major economic factor in several African and European countries (east and west), as well as in North America. Due to the lack of "trophy" animal species which are attractive to sport hunters, safari hunting in Asian and South American countries is of minor importance (exceptions are Chile and Argentina, where only introduced game is subject to trophy hunting).

⁵ CI Website: www.conservation.org.

35. Mentioning trophy hunting in the context of biodiversity conservation in general, and in the context of national parks/protected areas in particular, is socially not very well accepted. In recent years, however, progress has been made to make hunting more acceptable to society as part of ecosystem conservation efforts, thanks to models that demonstrate how trophy hunting can generate substantial revenue (and good-will if profits are shared!), while protecting wildlife and wildlife habitat adjacent to protected areas. Positive examples of acceptable profit sharing schemes that result in successful wildlife habitat conservation and wildlife management are known from the Communal Areas Management Program for Indigenous Resources (CAMPFIRE) in Zimbabwe and the "Nature Conservancies" in Namibia. CAMPFIRE's community principles are now spreading and being adapted to projects throughout Africa.

36. While these models are mostly applied to state-owned protected areas with corresponding support zones, models of privately owned areas managed for wildlife conservation, mostly in association with ranching activities, have been popular for decades in Southern African States (also in the United States and some East European Nations). Private hunting reserves (e.g., hunting or game farms) are mostly known from South Africa and Namibia. Such operations have proven to be highly profitable and very beneficial to resident wildlife populations and to biodiversity in general.

<u>Table 2:</u>	Typical Pros and Cons of Safari Hunting
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PROS	CONS
 Safari Hunting Harvesting wildlife can be an essential part of conservation management. Sustainable harvest levels do not affect viability of wildlife populations. Profit sharing with support zone communities of protected areas 	 Eco-tourism and hunting are not compatible. Hunting considered "unethical" by the majority of PA visitors. Potential overharvest and hunting of endangered species.
 provides for good wildlife habitat management beyond PA boundaries. Safari hunting can stimulate local economy through job creation and other fringe benefits. Safari hunting can assist in the control of problem animals, hence reducing conflicts with support zone communities. Assist in community development. Wildlife has economic value. 	 Self-regulating of game populations that do not justify hunting intervention (e.g., role of predators and diseases). Many countries do not allow foreign trophy hunting (Kenya, Pakistan, etc.). Donor-driven conservation projects have banned traditional hunting in many protected areas in Africa. Uneven distribution of proceeds from hunting. Poor involvement of local people.

iii) Other revenue generating options in use

37. **In situ production** of plant and animal species is another form of revenue generation associated with conservation areas. Since in situ production of wildlife for

commercialization purposes is rather problematic, it appears to be mostly related to privately owned conservation areas. Both conservation needs and commercial aspects are met in cases where species are multiplied in situ for re-introduction purposes to areas where the species has been depleted and where it is sold on the open market (life specimens for zoos, botanical gardens, collections; and products such as meat, hides, skins, furs, gene plasma, etc.). Typical examples include the Australian share company ESC that sells native species bred in captivity on company-owned conservation areas to zoos around the world; crocodile farms in Africa, Asia and Latin America; native animal species bred in Russian conservation units (Zapovedniks) for commercial use; and commercial production of medicinal plants in South American PAs.

38. **Sustainable forest management and agro-forestry** are very popular for revenue generation in conservation management, and are frequently associated with protected areas. Although some conservation units permit these activities inside the designated PA, it is more common to practice both techniques in the PA's support zone. A cautionary note with respect to tropical areas seems appropriate since sustainable management of tropical forests is still a very new and poorly researched approach. Models for successful sustainable tropical forest management are rare, and models may not necessarily be applicable to any tropical forest region, due to the very large system diversity of tropical forests compared to boreal forests.

39. In this context it is noteworthy that carbon sequestration may become a very interesting tool for revenue generation in conservation management. However, at this point it is still in its infancy.

40. There are countless other revenue-generating opportunities for protected areas that are compatible with overall conservation objectives currently in practice. The use of **apiculture** is widespread, and **bio prospecting** is becoming increasingly popular. The latter is still rather controversial and therefore needs a feasibility assessment before being applied.

41. In the light of a steadily growing demand for organically grown products especially in industrialized nations, **organic agriculture** has a very promising future and seems quite suitable for support zones of protected areas and/or for *special use zones* inside PAs.

42. **Artesanal mining** could be another attractive revenue-generating activity that can be compatible with conservation goals if carefully controlled, and if no contaminants are used in the process. Artesanal gold- and diamond panning is currently practiced by many indigenous people inside PAs, mostly in Central- and South America. Its popularity, however, is also growing amongst tourists as a favourite pastime associated with protected areas in North America.

43. Whichever arrangement is chosen to generate the much needed cash to pay for the protection and management of a conservation area, the sustainability of funding remains the key question. In their search for suitable solutions to this problem, many international donors have opted for the creation of funds. Unfortunately, many funds are set up as sinking funds covering a maximum of ten years (typical for KfW). Currently,

the use of endowment funds that provide a steady source of income and could safeguard sustainable financing of operational costs for protected areas are rare. They are mostly related to the GEF, and - unfortunately - are usually available in form of "seed funds" only. Against this background a combination of different funding mechanisms may seem the most appropriate approach to sustainable protection of conservation areas.

iv) Debt Swaps for Nature

44. It is common knowledge that developing countries which host most of the world's "ecological hotspots", tropical forests and threatened unique ecosystems, are under financial pressure to turn their resources into quick cash in order to meet their immediate domestic needs - and to pay off debts owed to industrial nations. These countries are sacrificing long-term, global resources for short-term, financial needs.

45. To help bridge this gap, many industrialized nations interested in nature conservation in the developing world allow for debt swaps. Debt swap agreements allow developing countries around the world to reduce their debt in return for setting up trust funds to pay for the sustainable conservation of protected areas. This has become an elegant tool to support chronically understaffed and under-budgeted state institutions in charge of the management of national PA systems. KfW has successfully negotiated debt swaps for nature and the resulting trust funds with various developing countries (e.g., Peru, Bolivia, etc.).

Potential Investors

46. Globalization has given the private sector more influence than ever over the fate of biodiversity. Conservation International is therefore engaging some of the world's leading corporations as allies in virtually all of the hotspots and wilderness areas where they are active. CI's corporate partners back CI's mission because they know that citizens worldwide - their customers, shareholders, and employees - share a common concern about protecting the environment. CI's corporate partnerships include *inter alia*: Bank of America, Ford Motor Company, Intel Corporation, McDonald's Corporation, Mobil Corporation, Starbucks Coffee, The Walt Disney Company, United Airlines, US Airways, etc.⁶.

47. The ethics of using multi-national corporations and the private industry as sponsors for biodiversity conservation projects continues to be heavily debated amongst environmentalists and NGOs. Although it may seem contradictory that an industry sponsors the solution to an environmental problem it has helped to create, the number of companies and industries that are interested in a "green" image is growing steadily. Many multi-national companies have already developed a corporate conscience that may be acceptable to environmentalists. Many more industries are interested in becoming internationally certified as "environmentally friendly". There is no reason why

⁶ CI, Ecotravel Center-Destinations. Website on eco-tourism.

the conservation movement should not capitalize on this growing opportunity to generate funding for a good cause.

The International Experience

48. At present there are numerous international environmental NGOs active worldwide. Many of them have developed and tested innovative approaches to biodiversity conservation in many developing countries on all continents. Several of them have successfully been involved in purchases of lands now managed for biodiversity conservation under different governance combinations. The wide spectrum of corresponding experiences by these NGOs appears of paramount interest to the proposed "Arche Noah" project. Annex 4 lists the most important international NGOs with relevance to this project. The annex provides summary information on the NGO, its selection criteria for candidate areas to be purchased, location and size of purchased areas, type of partnership if any, governance of area, revenues generated and sources of revenue, and lessons learned. Some relevant information available from these NGOs may be highlighted as follows.

49. In North America, land trusts have become the instrument of choice for conserving sensitive wildlife habitat and open spaces. 6.9 million hectares of U.S. land are already controlled by over 1200 land trusts. The 14 larger land trust organizations control 5.3 million hectares, and the Nature Conservancy alone has protected 4.2 million hectares since 1953. A very small percentage (1 to 17 per cent) of the land controlled by trusts is owned in fee simple. Some 20 to 50 per cent are transferred to government agencies for management and conservation easements; deed restrictions and mineral right ownership manage the rest.

50. U.S. land trusts have made many large acquisitions using taxpayer money to acquire greenways, wetlands and lands with important ecological values. There are a number of legislated acts and funds including Preservation 2000 and the Land and Water Conservation Fund that have made this possible. These groups function as government land agents and often acquire private land adjacent to or within existing protected areas (National Park Trust in particular). Economists have criticized these programs for not paying fair market prices and for failing to reward good management practices.

51. U.S.-based non-government and not-for-profit organizations of all sizes are involved with the protection of biodiversity internationally. Several of them have become instrumental in the protection and acquisition of millions of hectares of primary forests, wetlands and other ecosystems threatened by uncontrolled development and resource exploitation in the developing world. Land acquisitions by these NGOs appear to focus on global "ecological hotspots". The strength of this program is in building coalitions and networks, establishing synergies and helping to inform stakeholders, and to coordinate and implement the acquisition phase.

52. The two largest organizations are the **Nature Conservancy** and **Conservation International**. Both have been involved for many years in such activities as debt for

nature swaps encouraged by the 1989 Lugar-Bider Debt for Nature Bill and the 1998 Tropical Forest Conservation Act. TNC has more than one million members who have helped to protect over 28 million hectares of biodiversity-rich lands in Latin America, the Caribbean, Asia and the Pacific. TNC currently manages 1,340 protected areas, the largest system of private nature sanctuaries in the world. CI employs staff in almost 30 tropical countries, most of whom are nationals. As a general policy, TNC always transfers land titles of purchased lands to the respective government⁷. It also promotes private "lands for conservation" initiatives whereby the private sector becomes more deeply involved.

53. CI uses an interesting financing model that differs distinctly from most others in the US and worldwide that generally rely on membership contributions. CI raises substantial funding by approaching "intellectual" donors that are engaged at a higher level. They take donors to the field and involve them on the Board of Directors. They have about 4,000 donors, and out of their total budget, 1/3 comes from individuals, private foundations and corporations, 1/3 from large foundations, and 1/3 from bilateral and multilateral funding sources. The bilateral and multilateral funding is provided by AID, the World Bank, UN, GEF, KfW, and Japanese bilateral aid. All of them have offices in the UK, enabling them to access sources in Europe. CI is harnessing the power of the private sector to advance its conservation solutions. This means working with industries that pose threats to biodiversity in order to reduce their negative environmental impact. It means mobilizing resources from companies which share CI's interest in conservation. And it means working with corporations to educate consumers and employees about the threats to biodiversity and the possible solutions.

54. CI has tried many models, from a 3,000 ha ranch bought freehold in Brazil, to the acquisition or establishment of 1.9 million hectares of park in Bolivia, 1 million hectares in Peru, and other large reserves in Ecuador, Columbia, Surinam, Guyana, etc.

55. In this context it is worth mentioning that CI has recently formed an Alliance with the World Bank (i.e., "ecosystem partnership", 2000⁸) for the promotion of sustainable protected area conservation and land use with focus on "ecological hotspot" areas located in developing countries. The USD 100 million grant associated with this Alliance will assist in capacity building of pertinent local public institutions and civil society and the financing of innovative sustainable management/biodiversity conservation oriented projects. Grant money will not be used for land purchase.

56. Much may be learned from the **North American Elk Foundation** that has been involved in countless land purchase deals, land lease agreements, easements and any other conceivable habitat protection scheme in North America that benefits "elk" and related habitat. The Elk Foundation purchases land. These lands are either retained freehold, sold to a state or federal agency, or to a conservation buyer. The preferred tool of the Foundation is to work with "easements". A conservation easement is a voluntary legal agreement entered into by a property owner, and which outlines the type of development and uses that may occur on the property. In some instances, the donor

⁷ Alexander Watson, Head of International Section. Pers. commun., November 1, 2000.

⁸ CI proposal prepared for GEF submission, November 2000. "Ecosystem Partnership".

may receive a tax benefit. Mostly, the Elk Foundation serves as a catalyst for many projects, helping to negotiate complex, multi-party land transactions. The Foundation also provides seed money to set projects in motion. Up until recently the Foundation worked mainly in a reactive manner, taking advantage of conservation opportunities as they presented themselves. Today the Foundation has developed a refined Geographic Information System (GIS) map of habitat that helps to more scientifically select projects.

57. The experience of the Elk Foundation shows that easements are much more cost-effective for protecting lands than fee simple land purchases, with the added benefit of allowing private landowners to retain ownership⁹ in order to maintain habitat. Therefore, the Foundation presently focuses its energies on securing easements. Easements in general seem to work well because land can be protected without take-out partners. In this manner, an NGO can continue to replenish a revolving acquisition fund and move on to other projects.

58. Land purchases in Europe for biodiversity conservation are a relatively recent development compared to North America, although they are rapidly becoming more popular among NGOs. **The World Wide Fund for Nature (WWF**) is a leader in this field. For individuals such as Thomas Neumann¹⁰ it has become the instrument of choice for progressive nature protection in Germany. This may also apply to WWF Holland with the advantage that sustainable financing is made available through the Dutch state-run lottery system. Part of the lands purchased are returned to the Government for control, others are managed as free-hold areas and/or under comanagement agreements. Most of the free-hold nature reserves receive tax benefits.

As a response to threats to biodiversity beyond European boundaries many 59. initiatives such as the European Ecological Network (EECONET), and the ECONET Action Fund have been created in Europe. The latter is based on an agreement between the umbrella NGOs Eurosite, Euronature and the EUCC. With support from WWF and the Dutch Government the Ecofund has been created as a non-bureaucratic financial mechanism for emergency actions in order to preserve vital elements of the European Ecological Network. The rationale for the fund is to provide financing for conservation projects and land purchases of critical habitats rich in biodiversity, mostly in East European countries that have no money to effectively protect such areas. As explained by Fremuth¹¹, land acquisitions for conservation are attractive in East European countries due to comparatively low land prices. The return on any dollar spent is therefore comparatively high. Priority habitats and sites chosen for acquisition through the Econet Fund are limited to the most vital and threatened "axes" of the European Ecological Network with action focus on (a) wetlands, (b) coastal habitats, and (c) rich grasslands. According to Fremuth¹², in the overall, land acquisition deals financed by the Fund have been very successful and have led to very important alliances with local NGOs and government agencies in recipient countries. Ownership of areas purchased

⁹ Jennifer McConnel, Conservation Information Manager, Rocky Mountain Elk Foundation, correspondence for this assessment dated 13 October, 2000.

¹⁰ Thomas Neumann, WWF Germany. Pers. commun. 15 October, 2000.

¹¹ Wolfgang Fremuth, Managing Director Euronature. Pers. comm., 20 October, 2000.

 $^{^{12}}$ IBID.

is usually given to the respective state government under co-management agreements and majority control through civil society.

60. **Earth Sanctuaries Ltd**. (ESL) in Australia is a private sector alternative to a government-funded national park system. ESL is listed on the Australian stock exchange and has acquired ten sanctuaries near densely populated areas visited by tourists. Its goal is to select one sanctuary in each biogeographic region of Australia. To date, ESL has acquired 100 000 hectarees of land ranging from 34 to 65,000 hectares. All lands are bought freehold, and there are no partnerships involved. All land acquired is managed by the ESL.

Key Lessons as related to Land Acquisitions for Conservation

61. **TNC** has learned that it is important to generate visitor use fees and concession use fees that are high enough to channel an adequate amount into conservation. On the other hand, TNC is concerned about the threats of eco-tourism to ecosystems. They are developing a manual for ecosystem management planning with sections on, among others, monitoring systems, visitor education, and local employment.

62. According to Rod Mast from the **CI** (pers. commun. ¹³) financing should not exclusively be out-of-country if the operation is not to become colonial: "When the tab runs dry, so does the conservation". Local business leaders have to be involved in CI and on the Board of Directors.

63. **CI** lessons: There must be local ownership and management, as well as community involvement. The focus must be on working with people. CI usually centers its activities on a protected area that serves as an anchor for the whole project. These are always long-term efforts because it takes time to develop the acceptance and respect of the local people.

64. Lessons learned by **Earth Sanctuary Australia**: models are needed that show what can be done with degraded lands. It is important to inform the public of project goals and to keep them informed. A project needs to be "people friendly" if it is to work, and it needs to be economically sustainable as a block of land. Therefore, Earth Sanctuary uses mostly "eco-tourism" for cash generation.

65. Important lessons learned by **The Ancient Forest International** are that: (a) land titles must pass to a reputable, legally recognized and qualified in-country steward, and (b) sustainable protection requires funding both the purchase price and a minimally sustaining endowment to assure essential management, infrastructure, and educational outreach.

66. Lessons learned by the **North American Elk Foundation**: Easements are the preferred option over free-hold land acquisitions. Selection of land to be acquired for

¹³ Rod Mast, VP at CI. Pers. commun., October 13, 2000.

biodiversity conservation should be based on scientific judgement, although other opportunities may be realized.

67. Lessons by **WWF** and **NABU** in Europe: preferred option is the acquisition of strategically located small land parcels that serve as ecological stepping stones and that prevent large scale land alienation and development with potentially adverse impacts on biodiversity conservation.

68. Lessons by **Euronature**: endowment funds are a perfect vehicle to finance land acquisitions in East European countries where land prices are still comparatively low. Furthermore, co-management agreements and governance involving local stakeholders and NGOs are preferred arrangements over free-hold land titles.

69. **Endowment funds** appear to be the preferred option when establishing funds in support of selected protected areas. In contrast to other funds, endowment funds facilitate sustainable financing of recurrent costs.

<u>Feasibility</u>

The proposed "Arche Noah" project appears feasible in principle. The number of 70. world-renowned environmentalists and NGOs that see acquisitions of biodiversity-rich lands as the long-term solution of choice for sustainable conservation, is rapidly growing. This is in response to the urgency for protecting lands that are exposed to exponentially increasing pressures, especially in developing nations. In other words, the proposed project is timely. The key question, however, is whether a profit-oriented share company could be feasible or would be the optimum solution. The need for local stakeholder involvement and for ownership other than free-hold land tenure by the Share Company appears to be a key premise. Another premise would be governance with representation of both the state and civil society under the leadership of civil society. These rather complex issues should form the key elements of a recommended follow-up feasibility study. There are many other questions that have to be addressed in detail within a full-fledged feasibility study (e.g., synergies through cooperation with experienced NGOs and the international donor community, funds vs. share company or a combination of both, etc.). In this context, it is emphasized that much is to be learned from key international NGOs, the leaders in land acquisitions in developing countries for biodiversity conservation; and much to be gained through collaboration with these NGOs.

Risk Assessment

71. Land acquisitions by foreigners and/or foreign companies/enterprises in developing countries are common. Reasons for land acquisitions range from speculation in hope of financial gains, business establishment, retirement properties, to conservation purposes. Many developing countries do not legally permit land acquisitions by non-nationals. Using local partners and/or legalized easements commonly circumvents this obstacle.

72. The greatest risk associated with foreign land ownership is the high potential of expropriation by governments hostile to foreigners or interested in taking over a profitable business. To reduce this risk, NGOs involved in land purchases for biodiversity conservation in developing countries have frequently chosen to transfer ownership of acquired properties to the state or some other suitable local partner with a vested interest in conservation. There are only few examples of international NGOs successfully managing free-hold, NGO-owned conservation units in a developing country, because of the high risks involved.

73. Another risk factor is that biodiversity-rich lands may offer economically attractive opportunities that clash with conservation goals (e.g., forests, gold, diamonds, oil, etc.). Also, a developing nation may not react favorably to foreigners interfering with national sovereignty by acquiring lands for conservation (i.e., imperialism, loss of face, etc.).

74. If the risks for a non-profit-oriented land acquisition are high, the risks may be even higher for a profit-oriented enterprise. This applies in particular to share companies. It may not be easy to convince a small scale investor of the profitability of such an enterprise given the high risks, even if the investor is willing to forego profit maximization for the benefit of biodiversity conservation. If a share company is involved it may be easier to sell shares to corporations with a vested interest in conservation issues.

Minimum Project Requirements from the Conservation Perspective

75. Along with high biodiversity, rare and endangered ecosystems, and strategic geographic location, other priorities for the selection of an area should be: sizeable acreage, low land prices, cooperative government agencies and policies, proven stewards and managers, familiarity with key NGOs, associated groups and activist leaders, and the health and integrity of the ecosystem itself. Other prerequisites include:

- The selected area has to be managed within the national and local policy and legal framework;
- If extractive resource use is permitted within the selected area it has to be sustainable and performed in accordance with strictly controlled guidelines;
- The selected area requires a sound integrated management plan that has to be elaborated in a participatory fashion with the involvement of key local stakeholders. The management plan has to give priority to conservation management and preferably should fit internationally accepted guidelines;
- The selected area should have a designated support zone as an integral part of the management plan;

- The candidate area should form a critical link in the network of protected areas (i.e., ecological connectivity);
- Management of the selected area should integrate local communities and respect/accommodate traditional low impact user rights.

Selection of Suitable Candidate Areas

76. The choice of suitable candidate areas is influenced by the prerequisites as described in the previous chapter. It is recommended, however, to cooperate with key international environmental NGOs, in particular the CI, TNC, WWF and IUCN in locating suitable candidate areas and countries. Each of these NGOs has developed its own criteria and system of identifying globally significant biodiversity-rich areas, although many of those are overlapping. Each has established its own extensive network and very comprehensive ecological data bank that span the developing world and industrialized nations alike. All of them are supported through state-of-the-art GIS systems with worldwide coverage. WWF's current focus is on the "Global 2000" ecosystem approach that identifies priority systems by realm. CI concentrates on global "ecological hotspots" that have been selected based on sound scientific criteria and exhaustive consultations and brainstorms with world leading scientists. IUCN uses priority realms. All systems in use have their own merits. Ideally, however, synergies should be established to combine these efforts. Close consultation of leading NGOs within the suggested follow-up study would be of significant benefit to the project "Arche Noah".

D CONCLUSIONS and RECOMMENDATIONS

77. Time constraints did not permit an in-depth study of problems and issues related to the proposed project "Arche Noah". The project idea has its merits and appears feasible in principle. Land acquisitions and other forms of land conversion for biodiversity conservation in developing countries are increasingly popular and appear to become the tool of choice by key international environmental NGOs. Efforts seem to focus on designated widely recognized "ecological hotspot" areas worldwide. Conservation schemes range from free-hold land acquisitions and legalized easements to lease agreements and concessions. International NGOs have adopted very innovative approaches and methods regarding land management for conservation, including the purchase of large scale tropical forest utilization concessions as offered by developing countries on the free market.

78. Key lessons learned suggest that ownership of acquired lands should preferably be transferred to the respective states and/or the civil society of the recipient country. Mixed governance with majority representation by civil society appears to work best. Risks to foreign ownership through free-hold properties appear disproportionately high. Sustainable financing for protected areas under private- and/or any other legal

ownership appears to be best guaranteed through endowment funds. Currently, there are many revenue-generating schemes in use, ranging from classical activities such as hiking, trekking and other outdoor sports, to hunting, fishing, sustainable forest management, bio-prospecting, etc. Although most revenue-generating schemes currently in use would qualify for "Arche Noah" in principle, it is necessary to design a revenue-generating package for each candidate area individually.

79. Although it is unknown at this point whether a precedence for a share company that operates a protected area free-hold exists in a developing country, at least one successful model is known from an industrialized nation, Australia. There is no reason why such model should not work in a developing country as long as the ownership problem is resolved satisfactorily to reduce the risk of expropriation. Good opportunities in this respect may be offered through joint ventures involving civil society and/or the government of the candidate nation. With growing diversification of international money markets, indicators suggest that the overall prospects for "green" stocks appear to be excellent.

80. It is recommended that the proposed feasibility assessment for "Arche Noah" investigate the broad range of opportunities to create synergies. It appears more sensible to complement an existing project rather than to start a new venture. Of special interest in this context may be to support opportunities offered through current projects operated by KfW and/or GTZ. It is recommended to approach key NGOs with experience in land acquisitions and other schemes that benefit biodiversity conservation in order to assess partnership opportunities, and to assist in the selection of suitable candidate areas.

81. The following recommendations are made for the use of conservation trust funds (minimum requirements to be met):

- The issue to be addressed requires a commitment of at least 15 years;
- There is active government support for a public-private sector mechanism outside of direct government control;
- A critical mass of people from diverse sectors of society can work together to achieve biodiversity conservation and sustainable development;
- There exists a basic fabric of legal and financial practices and supporting institutions (including banking, auditing and contracting) in which people have confidence.

82. Fund support should be structured so as to provide incentives for raising additional capital and assistance in developing innovative capitalization approaches. Operating costs of conservation trust funds should be kept below 25 per cent. Funds should be set up as non-government institutions with mixed public-private governing bodies, and with a majority of non-governmental representatives.

83. Financial involvement in the "Arche Noah" project by corporations and any other potential funding agency should be acceptable from an ethical perspective (i.e., potential investors must have a relatively clean environmental record).

84. Proper use should be made of debt swaps for nature where feasible and where it enhances available funds. Debt swaps are ideal to secure government commitment and cooperation, while at the same time reducing the overall risk of a project such as "Arche Noah".

85. It is suggested that involvement should proceed from investigation, outreach, and negotiation, from identifying stewards and title holders, to developing acquisition strategies and management plans, contributing to national and local education efforts, and elaborating self-support plans.

86. It further is suggested to develop guidelines for environmental impact assessments to be rigidly applied before embarking on any questionable revenuegenerating scheme. This is a precautionary measure in the light of potentially adverse impacts on the ecological integrity of the system that the project intends to protect.

87. If the project is to be fielded - this also applies to a potential feasibility study -, it is recommended to start with one or two areas that are most conducive to success (i.e., that offer ideal framework conditions). The candidate areas should be located in countries that sustain an excellent relationship with Germany and that preferably have benefited from German assistance through KfW and/or GTZ in the past. Ideally, the project should be complementary to on-going support for a protected area.

In summary, a full-fledged feasibility assessment for the "Arche Noah" proposal seems justified.

Annex 1: TOR zur Voruntersuchung der Machbarkeit von Herrn Ruck's Vorhaben "Arche Noah".

Dr. Ruck, MdB, plant ein international tätiges Unternehmen (Aktiengesellschaft) bzw. Fonds zu gründen das zum Ziel hat, durch einen wirtschaftlich orientierten Naturschutz den Schutz der biologischen Vielfalt in Entwicklungsländern zu fördern. Finanziert durch private Investoren (renditeorientierte Unternehmen und Privatpersonen) sowie auch durch Spenden soll gezielt in wirtschaftlich attraktive und zugleich naturschutzrelevante Projekte investiert werden. Geplant ist u. a. Naturschutzgebiete auch unter wirtschaftlichen Gesichtspunkten - und damit nachhaltig - zu betreiben (v. a. durch Ökotourismus) sowie Investitionen in Projekte zur nachhaltigen Nutzung natürlicher Ressourcen (Jagd, nachhaltige Forstwirtschaft). Im Unterschied zu klassischen EZ hat diese Unternehmung die Absicht, Besitz und/oder Nutzungsrechte an Land und natürlichen Ressourcen durch Kauf oder Pacht zu erwerben und somit direkte Managementverantwortung zu übernehmen. Vorstellbar wäre, dass nach Festlegung eines Schutz- und Landnutzungskonzeptes einzelne wirtschaftliche Aktivitäten an andere private Sub-Unternehmer vergeben werden. Zur näheren Untersuchung der Machbarkeit des Vorhabens "Arche Noah" hat die Deutsche Bundesstiftung Umwelt bereits die Finanzierung einer Feasibility-Studie zugesagt.

Ziel dieser Vorstudie ist die grundsätzliche Klärung, ob ein solches Vorhaben im Prinzip zu realisieren ist, ggfs. Vorschläge für eine mögliche Umsetzung vorzulegen sowie darzustellen auf welche Punkte sich eine detaillierte Feasibility-Studie konzentrieren müsste.

Hierbei sollten vor allem die unten aufgeführten Punkte / Fragen im Rahmen eines <u>auf 5</u> <u>Tage befristeten</u> Gutachtereinsatzes untersucht werden.

- 1) Generelle Anmerkungen zu Vor- und Nachteilen eines solchen Vorhabens (Abhandlung der "pros & cons" aus Sicht des Naturschutzes).
- 2) Generelle Anmerkungen zur Realisierbarkeit eines solchen Vorhabens unter Berücksichtigung wirtschaftlicher, politischer und rechtlicher Faktoren.
- 3) Welche Unternehmensform ist denkbar (Aktiengesellschaft, Fonds, gemeinnütziger Verein oder...)?
- 4) Angebotsseite
 - Welche Projekttypen kommen prinzipiell in Frage (eco-tourism, wildlife utilisation, bioprospecting, carbon-offset projects, organic farming, sustainable forest management,...)?
 - Welche Vorausetzungen müssen erfüllt sein, damit solche Projekte wirtschaftlich betrieben werden können?

- Welche der in Frage kommenden Projekttypen sind wirtschaftlich besonders interessant?
- Welche Länder / Regionen bieten sich an?
- In wie weit kann das Privatsektorengagement im Naturschutz im südlichen Afrika als Beispiel dienen (Privatisierung staatlicher Schutzgebiete, Gründung privater Schutzgebiete: Sabi Sands in RSA, und NamibRand Nature Reserve in Namibia)?
- 5) Nachfrageseite
- Welche Investoren kommen in Frage und wie ist die potenzielle Nachfrage zu beurteilen?
- Ist eine Beteiligung von großen Unternehmen denkbar (Walt Disney, BP, Daimler Chrysler)?
- Wie ist das mögliche Interesse von "Green" oder "Ethical Investment Funds" an einer solchen Unternehmung zu beurteilen? Gibt es Erfahrungen?
- 6) Internationale Organisationen
- Haben internationale Organisationen (WWF, IFC, GEF, Weltbank, UNEP) Erfahrungen mit vergleichbaren privatwirtschaftlichen Initiativen und wie sind die Standpunkte?
- Wäre die Kooperation mit einer internationalen Organisation denkbar?
- 7) Umfeldanalyse
 - Wie sind die Erfahrungen der "Nature Conservancy" (USA), der "Earth Sanctuary" (Australien) sowie des "Terra Capital Funds" (IFC) in Bezug auf Mobilisierung privaten Kapitals und Wirtschaftlichkeit der Projekte?
 - Gibt es andere vergleichbare Vorhaben?
- 8) mögliche Kritik und Gegenargumente (aus Sicht der betroffenen Länder)
- 9) Kriterienkatalog, Mindestanforderungen des Naturschutzes an ein solches Vorhaben

<u>Annex 2:</u> Current management models for protected areas in developing countries.

PROS	CONS
 International donor and government Funds mostly used for elaboration of management plans, institutional strengthening, infrastructure development and capacity building; recently also include financing of pilot projects in support zone of PAs (classical model). Opportunity for debt swaps. Opportunity to include in overall country negotiations. Opportunities to establish endowment funds that involve the private sector in the governing board. 	 Financial and technical support mostly temporary, unless endowment fund associated. Government poor executant and ill equipped for efficient management. Generally low status of legal entity with mandate for protected areas. Generally poor relations with communities and low/no community involvement in management. Frequently no authority and/or interest in sustainable support zone development. Mostly donor driven projects. Cumbersome bureaucracy. Turnover in personnel and unsecured wages. Subject to political changes.
 2) International donor and local NGO Support may cover: NGO strengthening, infrastructure development, management plan, capacity development etc. Generally more cost-efficient than government model. Circumventing government bureaucracy. Development of local ownership. Generally excellent public standing. Involvement of local stakeholders. Generally integration of support zones. May serve as model. In-kind contributions by local partner. Largely independent of political changes. 	 Funding generally not sustainable. Generally lacking legal authority for policing. Needs officially delegated management mandate and Memorandum of Understanding. Mostly temporary financing, rarely endowment funds attached. Lost opportunity to strengthen government institution with legal mandate for PAs. No legal authority for support zone.
 3) International NGO and local NGO (with or without government participation) Similar to previous model but generally more flexible and better funded. Opportunities for capacity building in 	Similar to previous model.

page	<u></u>		
	fund raising.		
•	Good opportunity to use network of		
	international NGO and to learn from		
	lessons elsewhere.		
•	May serve as model.		
•	In-kind contributions by local partner.		
	nternational NGO and ethnic group		
-	Similar to previous model.	•	Generally no support zone activities
	Generally, development of strong		and no stakeholder involvement from
	ownership.		support zone.
	Opportunity for community financing,		
	strong commitment and people		
	involvement.		
	nternational NGO and private land-		
ow	-		
•	Strong ownership and commitment due	•	Potential danger of over-exploitation
	to vested interest.		and jeopardy to the ecological integrity
	Generally secured sustainable		through poor land use.
	financing.	•	Mostly not subject to Stet laws applied
	Excellent potential to generate		to publicly owned PAs.
	revenues through conservation		-
	compatible activities.		
	Little/no government interference in		
	management.		
	Private land-owner and government		
•	Potential to receive government	•	Potential for stifling restrictions.
	incentives.	•	Potential for incentives be turned into
•	Frequently subject to official policy and		dis-incentives.
	legal framework.		
•	Land and resource use restrictions		
	apply.		
•	Potential for development of strong		
	ownership.		
•	High potential for revenue generation		
-	and sustainable management.		
	Foreign company and government		
-	vnership and management by Co.)	•	Full dependency on government
	Opportunity to dictate the terms of		cooperation and commitment.
	MoUs.	•	Inherent danger regarding
•	Potential for sound revenue generation.		expropriation.
	Opportunity to receive government	•	Subject to changing partners, rules and
	incentives (tax incentives etc.).		policies.
•	Local employment opportunities.	•	Potentially low interest in support zone
			development and/or stakeholder
1			involvement.
		•	Pursuit of own vested interests
		•	

pages	
8) Foreign company and NGO	
(co-management, or exclusive	
management by NGO with	
financial/technical support by foreign	
company)	
Use of NGO as lobby.	 National laws may prohibit land
• Vested interest by NGO: ownership.	purchase by foreign company.
Strengthening NGO.	 No land registry in name of foreign
Good potential for community and	company.
stakeholder involvement.	 Subject to government imposed
Excellent opportunity for revenue	restrictions.
generation and sustainable financing.	
Circumventing government	
bureaucracy.	
Use of international network.	
Potential for sound marketing	
strategies.	
Access to international markets.	
9) Foreign company and land-owner	
Strong ownership and commitment by both profit oriented portion	 Possibly forfeiting government incentives.
both profit-oriented parties.	
Excellent opportunity for revenue generation and quateinable financing	 Presumably low potential for and stakeholder
generation and sustainable financing.	community and stakeholder involvement.
 Good potential for sustainable land/resource use models. 	 Subject to government sanctions and
	 Subject to government sanctions and restrictions.
 Avoiding government bureaucracy. Access to international markets. 	 Potential for bad land and resource use
	practices.
	 Potential threat to biodiversity
	conservation.

Annex 3: Nature-based tourism and other recreational activities offered in protected areas worldwide.

PROS	CONS
1) Hiking, trekking, mountaineering.	
 Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Opportunity for environmental education and awareness building. Low maintenance/operational costs. 	 Potential threat to ecological integrity. Attracts mostly low budget "rucksack" tourists and younger age classes.
2) Self-guided nature trails, canopy	
trails, etc.	
 Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Opportunity for environmental 	 Ecologically fully compatible if properly controlled. Costly construction and maintenance.
 education and awareness building. Popular with all income level tourists and age classes. Excellent revenue generation. 	
3) Guided nature interpretation.	 Unfavourable cost -profit ratio.
 Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Opportunity for environmental education and awareness building. Employment for nature guides. Low maintenance cost. 	Restricted target groups.
4) Scientific tourism.	
 Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Production of valuable background information on conservation unit. Potential to generate funding through research data. 	Very specific target group.Poor economic returns.
 5) Trailriding (horseback, yak, mule), elephant safaris, pack-trips with llamas and donkeys, and horse drawn carriage rides, etc. Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Opportunity for environmental education and awareness building. 	High operating cost for concessionaire.High costs related to control.

pages	
 Involvement of local people. Attractive income generation for local people and the conservation unit (concessions, leases etc.). High appeal to diversified target clientele. Low maintenance costs if activities are out-sourced. 	
 6) Camping, picnic. Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Good for public relations. Can generate high revenues. Attracts diversified clientele. 	 Costly maintenance. Potential threat to ecological integrity. Potential for adverse environmental impacts. Low opportunity for profit sharing and community involvement.
 7) Vehicle safaris. Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Excellent for revenue generation for conservation unit and operator. Opportunity for profit sharing. Attracts diversified clientele. 	 High operational costs for road maintenance and control. Potential hazard to wildlife. Potentially incompatible with other activities. Causes pollution and contamination.
8) Motorized boating and other motorized water sports. (Only environmentally compatible under strict control and restrictions. Not commendable in general).	 Generally not environmentally compatible. Needs strict controls (costly). Low potential for revenue generation. Very specific target groups (rich people sports). Highly controversial.
 9) Swimming and non-motorized water activities (snorkeling, canoeing, kayaking, windsurfing, sailing, etc.). Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Attracts diversified clientele. Opportunity for concessions and revenue generation. Low maintenance costs. 	 Limited opportunity for community participation.
 10) Sport fishing, trapping etc. Revenues from sale of licenses and leases. 	 Highly controversial. Trapping not compatible with conservation goals. Very limited target groups.

pages	
 11) Hang-gliding, ultra-lights, parachuting. Environmentally compatible if properly controlled and if not exceeding the carrying capacity. 	 Very limited target groups and low potential for revenue generation. Unfavourable cost-profit ratio. Dangerous sports with high liabilities.
 12) River rafting. Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Profit sharing opportunities and good potential for revenues. Appeals to diversified clientele of all income brackets. No/low operational costs if outsourced. 	 Limited clientele, dangerous, and high liabilities.
 13) "Robinson Crusoe Club". Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Opportunity for environmental education and awareness building. Appeals to families and diversified clientele. Potential for high revenue generation. Excellent potential for revenue sharing and local employment opportunities. 	 Very cost- and maintenance intensive. Potential for adverse environmental impacts. Costly marketing effort.
 14) Conventions and environmental training facilities. Environmentally compatible if properly controlled. Opportunity for environmental education and awareness building. High potential for revenue generation. 	 Very restricted target groups. High operational costs. Costly marketing process.
 15) Weekend cottages and recreational land leases. Environmentally compatible if properly controlled. Good source of revenue from land sale and/or lease agreements. and if not exceeding the carrying capacity. 	 Mostly controversial. Serving rich people only. Potential for adverse environmental impacts. No/low potential for public involvement and/or profit sharing.

pages	
 16) Snow-based non-motorized activities (snowshoeing, cross country skiing, slay-rides etc.). Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Opportunity for environmental education and awareness building. 17) Motorized winter activities (snow machines etc.). 	 Low cost-profit ratio. Limited target groups. Highly controversial and environmentally not compatible.
 18) Cultural activities Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Appeals to diversified clientele. Excellent potential for public involvement and profit sharing. 	High maintenance costs and high costs related to control.
 19) Arboretum, interpretation centers, museums and zoos Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Opportunity for environmental education and awareness building. Appeals to diversified clientele. High potential for revenue generation. 	 Zoos and captive animals are highly controversial and may mostly not be compatible with conservation objectives.
 20) Eco-villages and concessions. Environmentally compatible if properly controlled and if not exceeding the carrying capacity. Opportunity for environmental education and awareness building. High potential for public involvement, revenue generation, and profitsharing 	 Little objections if properly designed and controlled.

Annex 4: Information on non-government organizations involved in land acquisitions for biodiversity conservation worldwide.

Organization Contact Information	Year est.	Location of land acquired	Million ha land acquired (range of size)	Supporters Partnerships	Revenues	Selection Criteria	Management	Lessons learned
The Nature Conservancy 4245 North Fairfax Dr. Arlington, Virginia Andy Drum, Eco- tourism Director Carter Roberts, Central Am. Program 703-841-4861 <u>www.tnc.org</u> Alexander Watson Head of International Section <u>Awatson@tnc.org</u>	1951	Canada, Latin America, Caribbean, Asia, Pacific	24.3	Partner with in- country public and private organizations such as conservation organizations	Debt for nature swaps.	Use ecoregional vegetation classification systems, GIS, satellite imagery and other scientific methods. Initiated Natural Heritage Program and Conservation Data Center Network.	Currently manages 1,340 preserves, largest system of private nature sanctuaries in world.	 Commitment to working with local people gives the organization on the ground presence in communities around the world. Must generate visitor user fees and concession use fees that are high enough to channel an adequate amount into conservation. Need for a manual for ecosystem management planning
Conservation International 2501 M St. NW Suite 200 Washington DC 20037	1987	Latin America, Asia, Africa	Support for biosphere reserves	Partners with corporations, local communities and recently formed a partnership	Donations, and partnerships with corporations, debt-for-nature swaps	Work on protected areas focuses on 25 biosphere reserves, hotspots, tropical wilderness, and key marine ecosystems	Of the 23 countries with CI programs, 17 have eco-tourism program strategies to	• Eco-tourism ventures must be sustainable, economically and ecologically.

Sara Musinsky, Program Assistant CI-UNESCO Project Edward Millard, Director of Eco- tourism 202-429-5660 www.conservtaion.o rg				with the World Bank. Partners with UNESCO Biosphere Reserves.	Inter-Am. Dev. Bank.	Uses a Rapid Assessment Program expedition.	promote community capacity building and training. CI has developed an online Ecotravel Center.	•	Integrates economic development, cultural survival, and environmental conservation Eco-tourism is integrated with agroforestry, and indigenous handicrafts.
Ancient Forest International P.O. Box 1850 Redway, California 95560 707-923-3015 <u>www.ancientforests.</u> <u>org</u> afi@igc.org	1989	Chile, Ecuador, Tasmania, Mexico, U.S.	0.4	Government agencies, NGOs, forest activist leaders.	Donations, Foundations	Most diverse, endangered and extensive primary forests in temperate and tropical worlds. Also considers strategic geographic position, sizable, low price, cooperative government agencies, and policies, proven stewards, and managers, and familiarity with key activists.	Title must pass to a reputable, official and qualified in- country steward	•	Protection requires funding purchase price. Also must fund minimally sustaining endowment to assure essential management, infrastructure and educational outreach
The Nature Conservancy 4245 North Fairfax Dr. Arlington, Virginia 202-429-5660 <u>www.conservtaion.o</u> <u>rg</u>	1951	U.S.	4.45	62% individual members (1 M) 24% foundations and grants 14% corporations	59% from supporters 30% investments, 6% gov't contracts and grants, 3% leases, royalties, 2% private contracts and mitigation	Use ecoregional vegetation classification systems, GIS, satellite imagery and other scientific methods. Initiated Natural Heritage Program and Conservation Data Center Network.	Developing own management programs for fire, hydrology, and exotic plants.	•	Results- oriented, non- confrontational approach allows the forging of partnerships. Sound science, partnerships and innovation are hallmarks of work.

Earth Sanctuaries Ltd. P.O. Box 1135 Stirling, South Australia 5152 618-8370-9422 www.esl.com.au webinfo@esl.com.a u	1984	Australia	0.09	Stock-exchange listed company	\$3.8 M Cash flow from eco- tourism, education, consulting, contracts, wildlife sales and 17.8% of revenue is donations.	Develops sanctuaries close to population and tourism densities.	Manages for protecting rare species and tourism.	•	Altruism has not supplied funds to create predator-free sanctuaries. ESL strives to be ecologically and economically sustainable with 6,500 investors
Terra Capital Fund Banco Axia Sao Paolo Patrizia Moles, General Manager		Latin America	Invests in organic agriculture	Management Fund	\$15 M of public money	Invests in projects with a positive impact on biodiversity: organic agriculture	Many businesses are too small and require creativity to make deals and prevent buyouts.	•	Pioneers in a sector considered too risky by many financial institutions. Results are potentially fantastic because of demand for organic products.
Land Trust Alliance 1331 H St. NW Suite 4000 Washington DC 20005 Aaron Payne, Information Center Specialist 202-638-4725 <u>www.lta.org</u> Landtrust@Indiana.e du	1982	1,227 local, regional and national land trusts in U.S., Canada and Costa Rica	1.9 All sizes	Help landowners to protect land	Donations of land or conservation easements. Foundation grants.	Protect open spaces of all kinds, wetlands, wildlife habitat, ranches, shorelines, forests, scenic views, farms, watersheds, historic estates, and recreational areas that has conservation, historic, scenic, or other value as open space.	Management depends on landowner and agencies involved.	•	Local and regional organizations protect local areas. Decentralizatio n allows local groups to make own decisions while benefiting from networking with a national alliance.

Wildlife Land Trust 2100 L St. NW Washington DC 20037 1-800-729-SAVE <u>www.wlt.org</u> wlt@hsus.org		U.S. and Romania	0.02 (all sizes)	Partner with landowners.	Donations gifts and bequests.	Affiliate of Humane Society: preserves natural habitats for wildlife animals	Uses conservation easements and fee title ownership	 Landowners receive tax reductions Landowners asked to provide financial support for stewardship
The Conservation Fund 1800 N. Kent St. Arlington, Virginia 22209-2156 Nicholas Dilks 703-525-6300 <u>www.conservationfu</u> <u>nd.org</u> ndilks@conservatio nfund.org	1985	U.S.	0.9 1 to 142,000	Partner with private citizens, public agencies, corporations, and NGOs.	Established a revolving fund to support land acquisition to create more leverage than other organizations and spend less on fund- raising.	To protect the best of America's outdoor heritage. Uses partner's criteria so this varies but generally includes a conservation purpose: wildlife habitat, public open space, scenic areas and historic sites.	Management mainly by government agencies or NGOs or private individuals who agree to deed restrict the land in perpetuity.	 Use innovative partnerships between industry and local communities Partners demonstrate sustainable conservation solutions emphasizing the economic and environmental goals.
Trust for Public Land 116 New Montgomery St. 3 rd Floor San Francisco, California 94105 415-495-5660 <u>www.tpl.org</u> mailbox@tpl.org	1972	U.S.	0.4	Landowners, gov't agencies, and community groups	Property owners, individuals, corporations, and foundations.	Protects urban parks, gardens, greenways and riverways for recreation and spiritual nourishment to improve the health and quality of life of American communities.	Land is conveyed to government agencies. Has a tribal lands initiative.	 Pioneers new ways to finance parks and open space. Promotes the importance of public land. Helps communities establish land- protection goals.
National Park Trust 415 2 nd St. NE	1983	U.S.	Potential to acquire 2.4	National Park Service,	Donations, Foundations	Mission is to assist the National Park Service	Government agencies will	• National Park

Suite 210 Washington DC 20002 <u>www.parktrust.org</u> prairie@parktrust.or g				individuals, Foundations, corporations.		and others to acquire private land within or adjacent to national parks and acquire land to create new park areas.	manage. NPT is the only private organization, which manages a national park, the Tallgrass Prairie National Preserve.	•	lands are endangered by adjacent private land. Stimulates interest, and participation in preservation of national parks. Promotes projects and grants to other NGOS.
Ducks Unlimited, Inc. One Waterfowl Way Memphis, Tennessee 38120 901-758-3825 <u>www.ducks.org</u> dwrinn@ducks.org	1937	U.S. Canada	3.8 some of which was acquired	Partner with gov't agencies, corporations, foundations, and individuals.	Donations, sales of merchandise, corporate sponsorships and event underwriting.	Uses GIS to determine best wetland densities and wildlife use to protect annual life cycle needs of North American waterfowl in important wetlands and associated uplands.	Managed by government agency to protect, enhance, restore and manage	•	DU will sometimes buy property, restore it, and sell or donate the property usually to a government agency that will manage it. Success hinges on personal involvement of members.
Rocky Mountain Elk Foundation P.O. Box 8249 Missoula, Montana 59807-8249 800-CALL ELK www.rmef.org rmef@rmef.org	1984	U.S., Canada	1.2 enhanced or acquired	Individuals, corporations	Donations, sales of merchandise, corporate sponsorships and event underwriting	Elk habitat and other wildlife habitat.	Government agencies		Easements preferred over free-hold lands.
Econet Action Fund Wolfgang Fremuth Project Coordinator	1994	9 east European countries	? ha acquired and enhanced	Local NGOs and Government	WWF, interest from Fund investment, German and	biodiversity habitats, critical to Europe Econet	Co-management with local NGOs , Governmentand civil society		Stakeholder particip[ation is imperative Endowment

		Dutch		funds needed
O2226-2045		Government		for sustainable
Wolfgang				financing
Fremuth@aol.com				_